Terrain Development Division
Architectural and Engineering Services
Environment Canada
Western Region

Division, Aménagement du Paysage
Services d'architecture et de génie
Environnement Canada
Région de l'Ouest

WESTERN REGION CAMPGROUND REPORT

GLACIER NATIONAL PARK

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91-03118/

WESTERN REGION CAMPGROUND REPORT

GLACIER NATIONAL PARK

REGIONAL CAMPGROUND REPORT

EXECUTIVE SUMMARY

This report is a component of the regional campground study completed in 1989. It outlines the required recapitalization work and an implementation framework for the three campgrounds within Glacier National Park. The report has been prepared in a Project Brief format and can be adapted to either a Capital Project or Operational and Maintenance Task. The summary of costs are in 1989 dollars and are itemized as Architectural, Engineering and Landscape Work.

The study was intended to substantiate the costs of work required as a result of site investigations, interviews and various Management Planning and Visitor Services Studies. Architectural and Engineering Services have compiled a complete record in 1987, and 1988 of the individual campgrounds inventory and have completed a condition rating system. The inventory and condition report were utilized to prepare cost estimates for recapitalization in the three campgrounds in Glacier National Park to the total number of universal campsites to be recapitalized are 219 sites and are estimated to cost 1.4 million dollars.

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WESTERN REGION CAMPGROUND REPORT

WESTERN REGION CAMPGROUND REPORT

MOUNTAIN CREEK CAMPGROUND Date: August 26, 1987

Glacier National Park

A. PROJECT PROPOSAL

Prepare a campground rehabilitation plan for the 306 site campground. The scope of work would include the site rehabilitation, building improvements, utility improvements, campsite reduction plan, pedestrian and vehicular circulation improvements and related work items.

B. PURPOSE

The improvements proposed are as a result of an on-site inspection and a brief review of the problems and anticipated needs/improvements. The Park will be preparing a Service Plan for the Glacier Park operation by May 31, 1988. This will identify the detailed requirements for the campgrounds and how the improvements can be carried out under the Regional Campground Study. This report however, has endeavored to identify some general comments/deficiencies that were present when the inspection was done in August 1987. The Service Plan is a good tool for managing the Park resources and facilities and this campground study will only react in a positive manner to the Service Plan.

C. FUNCTION

1. Team Member

Team Captain: Patrick Glover, WRO, Architectural & Engineering Services

Park Staff: Rick Reynolds, Chief, Visitor Services
Ernie Seiber, General Works Manager
_____, Interpretation
_____, Resource Conservation

2. Major Work Item

1. Buildings:

- Kiosk - the Park Service Plan will decide if this facility is to remain or be relocated. The structure itself serves the campground very well, although there is some concern with the location of the kiosk.

WESTERN REGION CAMPGROUND REPORT

1. Buildings (Cont'd):

   - Shelters - assess and improve roofs.
   - Toilet Building - the existing skylights and roof are in poor condition and are to be replaced. (The General Works section started some replacement in 1987.)

2. Utilities:

   - Assess and improve water and sewage disposal systems as required.
   - Grey water disposal.
   - Lighting requirements.
   - Investigate propane requirements for heating water and lighting at toilet/shelter buildings.

3. Roads:

   - Some roads have an asphalt surface and are generally in good condition.
   - The loop roads are gravel and should be improved to possibly a chip seal finish if financially feasible.
   - Upgrade signage.
   - Review circulation.

4. Landscape:

   - The major problem with this campground is the large number of sites which are not being used due to the low occupancy. The total number of sites is 306 sites. Due to the low occupancy rate however, 140 sites are available for camping.
   - 46 sites are utilized by trailers and RV's. However, tenters do use these as well.
   - 94 sites are available as universal sites.
   - Trailer Sites:
     - Minor grading of roads.
     - Table painting (minor work).
     - Directional signage to facilities.
   - Universal Sites:
     - Tenting surface.
     - Minor improvements to roads and parking spur.
     - Improve activity pad area.
     - Vehicle barriers required.

* - The campground has 166 campsites which are not being used and have started to convert back to nature.

WESTERN REGION CAMPGROUND REPORT

4. Landscape (Cont'd):

   - These camping loops/sites should have the tables, stoves, buildings and other facilities removed and the roadways scarified and seeded with grass.
   - The campground has been identified for group use but until the Park Service Plan has been completed the exact details for improvements are still under review.

5. Interpretation:

   - The theater was removed within the past years. There has been some discussion regarding this decision of removal and the Service Plan will be addressing this situation.
   - The campground has no trails or features to attract long stay campers and the use of Park person years to have Camp Fire talks is under discussion. No firm direction has been made however.

D. SCHEDULE

1. 1987/88: Preliminary Inspection and Assessments of Campground.
2. 1987 -->: Park Service Plan Prepared.
3. Year One: Detailed Assessment of Campground.
4. Year Two: Ongoing Recapitalization.

E. OPERATIONAL AND MAINTENANCE

1. Design Capital Person Years are involved at WRO.
2. Investigate use of fuel for lighting and hot water at the toilet buildings to remain.

F. GENERAL CAMPGROUND STATISTICS

1. Design Criteria (From EC - Parks Manual)

   1. Semi-Serviced (Level 2):

      - Tent and trailer camping with no utility hook-ups.

WESTERN REGION CAMPGROUND REPORT

1. Semi-Serviced (Level 2) (Cont'd):

   - Centralized sanitary, water and sewage disposal facilities are provided. (Note: No sewage disposal facilities are existing.)

2. Density of Campground: 8 - 18 sites/hectare.

3. People/Campsite: 1 - 8 people/campsite.

4. Capacity: 15 - 250 campsites.

2. **Existing Conditions**

   1. 140 Semi-Serviced Campsites (306 total capacity).

   2. Mountain Creek Campground has an average annual occupancy of 12% and has not reached 90% one-day occupancy in the past 5 years.

G. RESOURCE CONSERVATION

EARP assessment Level One (Preliminary Screening) must be completed in 1988/89.

Level Two assessments must be completed prior to any detailed Area Development Plan.

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WESTERN REGION CAMPGROUND REPORT

MOUNTAIN CREEK CAMPGROUND

DESCRIPTION OF WORK ITEM	PRIORITY	QUANTITY	UNIT COST	PHASING			TOTAL COST
				YR - 1	YR - 2	FUTURE	
A. ARCHITECTURE				9.9	109.33	NIL	119.23
B. LANDSCAPE				4.95	232.234	217.0	454.184
C. UTILITIES				4.95	106.9	NIL	111.85
D. GRAND TOTAL PROJECT COSTS				19.8	448.464	217.0	685.264

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WESTERN REGION CAMPGROUND REPORT

MOUNTAIN CREEK CAMPGROUND

DESCRIPTION OF WORK ITEM	PRIORITY	QUANTITY	UNIT COST	PHASING			TOTAL COST
				YR - 1	YR - 2	FUTURE	
A. ARCHITECTURE							
1. Renovate and Repair 2 toilet Buildings in Recreational Vehicle Area		2	10.0		20.0		
2. Retrofit 2 toilet/shelter buildings in loops 1 - 24 and 71 - 109		2	25.0		50.0		
3. Relocate Entrance Kiosk to Illecillewaet Campground		Lump	Sum		1.8		
4. SUB-TOTAL					71.8		71.8
5. CONTINGENCY 20%					14.36		14.36
6. RISK 15%					10.77		10.77
7. ENGINEERING: MBC: 55 x 1.8 x 0.2 PY				9.9	9.9		19.8
8. ADMINISTRATION					2.5		2.5
9. TOTAL				9.9	109.33	NIL	119.23

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WESTERN REGION CAMPGROUND REPORT

MOUNTAIN CREEK CAMPGROUND

DESCRIPTION OF WORK ITEM	PRIORITY	QUANTITY	UNIT COST	PHASING			TOTAL COST
				YR - 1	YR - 2	FUTURE	
B. LANDSCAPE							
I: RECREATIONAL VEHICLES (3 LOOPS)							
:LOOPS 25-42;43-55 ;56-70							
1. Stoves		Lump	Sum		0.015		
2. Tables		50	0.06		3.0		
3. Wheelstops		NIL	NIL		NIL		
4. Tent Pads		NIL	NIL		NIL		
5. Site Markers		46	0.018		0.845		
6. Spurs and Campsites		46	0.193		8.9		
7. Wood Bin: Covered		2	3.5		7.0		
8. Garbage Container		5	0		0.0		
9. Standpipes		6	0.5		3.0		
10. Dump Station		1	1.0		1.0		
11. Roads		Lump	Sum		2.1		
12. Trails		Lump	Sum		1.2		
13. Signage		Lump	Sum		0.5		
14. Tree Clearing		Lump	Sum		1.0		
15. SUB-TOTAL RECREATIONAL VEHICLE LOOPS					**28.56**		

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WESTERN REGION CAMPGROUND REPORT

MOUNTAIN CREEK CAMPGROUND

DESCRIPTION OF WORK ITEM	PRIORITY	QUANTITY	UNIT COST	PHASING			TOTAL COST
				YR - 1	YR - 2	FUTURE	
B. LANDSCAPE (Continued)							
II: INDIVIDUAL CAMPSITES IN RE-DEVELOPED LOOPS 1-24 AND 71-90							
1. Stoves		63	0.061		3.9		
2. Tables		62	0.09		5.58		
3. Wheelstops		0	NIL		0.0		
4. Tent Pads		62	0.262		16.3		
5. Site Markers		62	0.027		1.674		
6. Spur Roads and and Circulation Roads		8000 squ. m	0.005		40.0		
7. Trails (1) Existing		750 squ. m	0.010		7.5		
(2) New		500 squ. m	0.020		10.0		
8. Wood Bins: covered		4	3.5		14.0		
9. Garbage Containers		4	1.5		6.0		
10. Signage		0.025	40		1.0		
11. Overall Campground Rehab.		Lump	Sum		9.5		
12. Campsite Barriers		375	0.020		7.5		
13. SUB-TOTAL REDEVELOPED LOOPS 1-24 AND 71-109					122.954		

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WESTERN REGION CAMPGROUND REPORT

MOUNTAIN CREEK CAMPGROUND

DESCRIPTION OF WORK ITEM	PRIORITY	QUANTITY	UNIT COST	PHASING			TOTAL COST
				YR - 1	YR - 2	FUTURE	
B. LANDSCAPE (Continued)							
III. REMOVAL OF NOT REQUIRED SITES /ROADS/AND BUILDINGS							
1. Camping Site Removal		196	0.115			22.54	
2. Spur and Circulation Road Removal		12,618 cubic m	0.0022			27.76	
3. Trail Removal		1,000 cubic m	0.0015			1.5	
4. Service Unit Removal		25	0.15			3.75	
5. Perimeter Road Removal		2,400 cubic m	0.0032			7.78	
6. Theatre Site Clean-Up		1,375	0.0026			3.6	
7. Miscellaneous Work Items		Lump	Sum			5.0	
8. Toilet Building Removal		6	4.05			24.3	
9. SUB-TOTAL REMOVAL OF NOT REQUIRED SITES/ ROADS/BUILDING		**196 SITES**	**0.490 /SITE**			**96.23**	

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WESTERN REGION CAMPGROUND REPORT

MOUNTAIN CREEK CAMPGROUND

DESCRIPTION OF WORK ITEM	PRIORITY	QUANTITY	UNIT COST	PHASING YR - 1	PHASING YR - 2	PHASING FUTURE	TOTAL COST
B. LANDSCAPE (Continued)							
I: RECREATIONAL VEHICLE (3 LOOPS)					28.56		
II: INDIVIDUAL CAMPSITES IN REDEVELOPED LOOPS 1-24 AND 71-109					122.954		
III: REMOVAL OF NOT REQUIRED SITES /ROADS AND BUILDINGS						96.23	
* IV: KIOSK RELOCATION AND CONVERSION TO SELF-REGISTRATION		Lump	Sum		4.0		
* V: IMPROVE ENTRANCE ROAD AND SERVICE ROAD							
(1) Asphalt		3,000 cubic m	0.010			30.0	
(2) Gravel		3,000	0.006			18.0	
						48.0	
6. SUB-TOTAL					155.514	144.23	299.744
7. CONTINGENCY 20%					31.1	28.84	59.94
8. RISK: 15%					23.32	21.63	44.95
9. ENGINEERING MBC 55 x 1.8 x 4				4.95	19.8	19.8	44.55
10. ADMINISTRATION					2.5	2.5	5.0
TOTAL				4.95	232.234	217.0	454.184

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WESTERN REGION CAMPGROUND REPORT

MOUNTAIN CREEK CAMPGROUND

DESCRIPTION OF WORK ITEM	PRIORITY	QUANTITY	UNIT COST	PHASING			TOTAL COST
				YR - 1	YR - 2	FUTURE	
C. UTILITIES							
1. Water Supply System (R. Howe's Report)		Lump	Sum		75.0		75.0
2. Contingency					12.0		12.0
3. Risk					8.0		8.0
4. Engineering MBC: 55 x 1.8 x 1.5 PY				4.95	9.9		14.85
5. ADMINISTRATION					2.0		2.0
6. TOTAL				**4.95**	**106.9**	**NIL**	**111.85**

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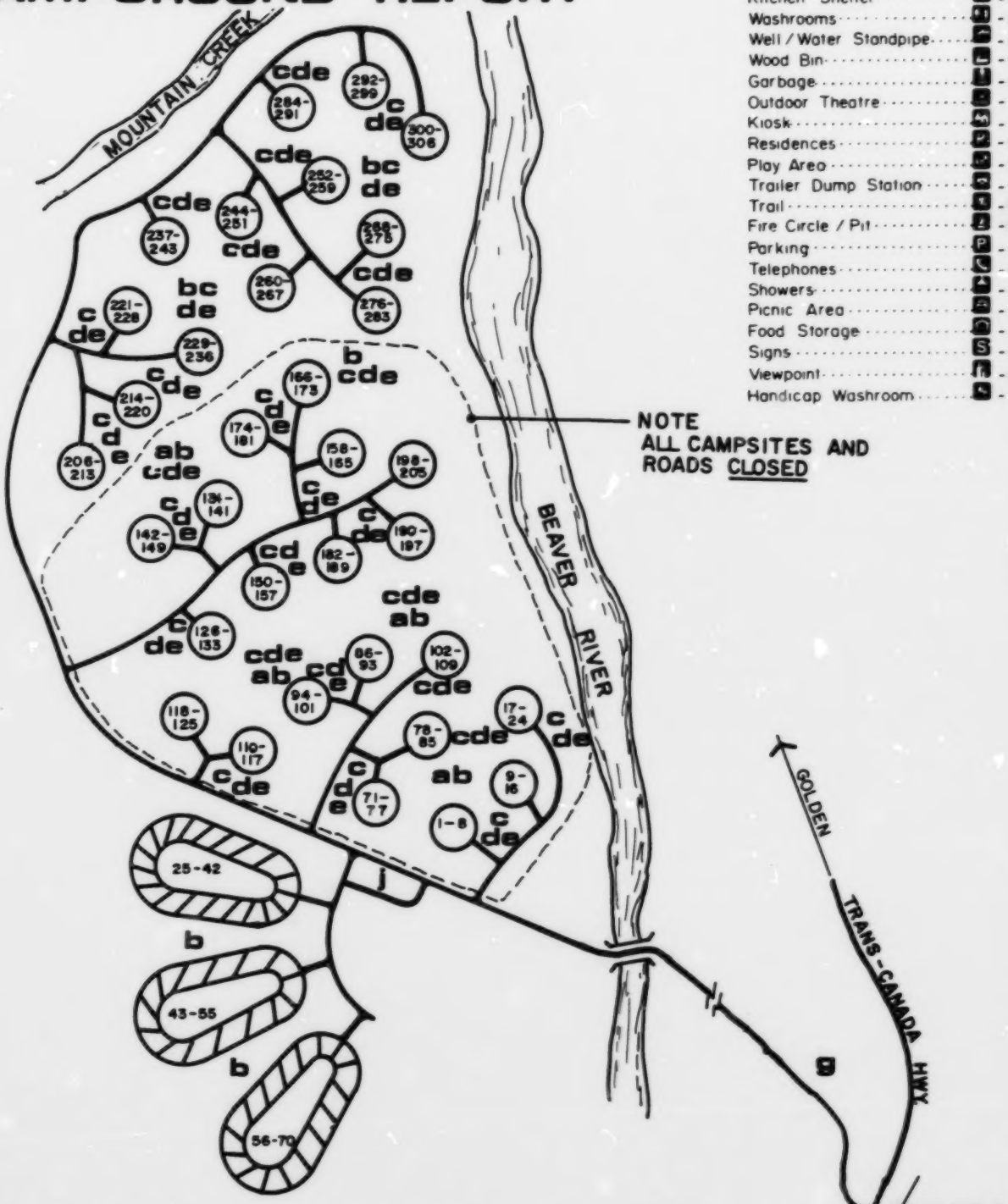

LEGEND

- Kitchen Shelter - a
- Washrooms - b
- Well / Water Standpipe - c
- Wood Bin - d
- Garbage - e
- Outdoor Theatre - f
- Kiosk - g
- Residences - h
- Play Area - i
- Trailer Dump Station - j
- Trail - k
- Fire Circle / Pit - l
- Parking - m
- Telephones - n
- Showers - o
- Picnic Area - p
- Food Storage - q
- Signs - r
- Viewpoint - s
- Handicap Washroom - t

Mountain Creek Campground - GLACIER

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WESTERN REGION CAMPGROUND REPORT

MOUNTAIN CREEK CAMPGROUND GNP

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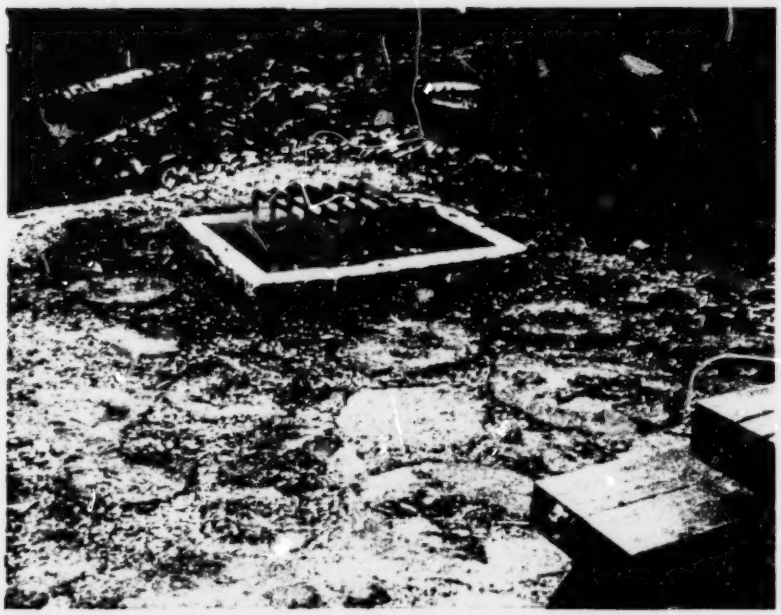
WESTERN REGION CAMPGROUND REPORT

MOUNTAIN CREEK CAMPGROUND GNP



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WESTERN REGION CAMPGROUND REPORT

WESTERN REGION CAMPGROUND REPORT

ILLECILLEWAET CAMPGROUND Date: August 26, 1987

Glacier National Park

A. PROJECT PROPOSAL

Prepare a campground rehabilitation plan for the 39 site campground. The scope of work would include the site rehabilitation, building improvements, utility improvements, sanitary dumping station, pedestrian and vehicular circulation improvements and related work items.

B. PURPOSE

The improvements proposed are as a result of an on-site inspection and a brief review of the problems and anticipated needs/improvements. The Park will be preparing a Service Plan for the Glacier Park operation by May 31, 1988. This will identify the detailed requirements for the campgrounds and how the improvements can be carried out under the Regional Campground Study. This report however, has endeavored to identify some general comments/deficiencies that were present when the inspection was done in August 1987. The Service Plan is a good tool for managing the Park resources and facilities and this campground study will only react in a positive manner to the Service Plan.

C. FUNCTION

1. Team Member

Team Captain: Patrick Glover, WRO, Architectural & Engineering Services

Park Staff: Rick Reynolds, Chief, Visitor Services
Ernie Seiber, General Works Manager
_____, Interpretation
_____, Resource Conservation

2. Major Work Items

1. Buildings:

- Kiosk - new unit required.
- Toilet Buildings - upgrade facilities.
- Shelter - upgrade.
- Shower Building - this has been proposed but not yet approved. Pending Service Plan, the facility can be located within the campground at a central location.

WESTERN REGION CAMPGROUND REPORT

2. Utilities:

- Assess and improve water system as required.
- Pending Service Plan, a sanitary waste dumping station may be sited at the Illecillewaet Campground. This facility could be located near the TCH/campground access road intersection.
- Grey Water Disposal.
- Lighting requirements.
- Investigate propane requirements for heating water and lighting at toilet/shelter buildings.

3. Roads:

- Some roads have an asphalt surface and are generally in good condition.
- The loop roads are gravel and should be improved to possibly a chip seal finish if financially feasible.
- Upgrade signage.
- Review circulation.
- Review and assess a potential site for the new kiosk building with traffic flows and parking requirements in mind.
- Investigate the potential (if approved by Service Plan) the possibility of locating the Glacier House trailhead to an area inside the campground at the proposed kiosk/shower building site.

4. Landscape:

- Universal sites.
- 59 sites existing require a universal site.
- Parking spur.
- Fire box.
- Portable/heavy type of table.
- Vehicle barriers required.
- Campsite markers.
- Linking trails to facilities.
- Fire wood enclosures.
- Tenting surface-soft.

5. Interpretation:

- The campground is located adjacent to a large number of back country trails and a trailhead/information kiosk is required.
- Assess the requirements/location at the Glacier House Trailhead.
- Trail signs.

WESTERN REGION CAMPGROUND REPORT

D. SCHEDULE

1. 1987/88: Preliminary Inspection and Assessments of Campground.
2. 1987 -->: Park Service Plan prepared.
3. Year One: Detailed assessment of campground.
4. Year Two: Ongoing Recapitalization.

E. OPERATIONAL AND MAINTENANCE

1. Design Capital Person Years are involved at WRO.
2. Investigate options for fuel use to generate lighting at Toilet Buildings and for hot water use.

F. GENERAL CAMPGROUND STATISTICS

1. Design Criteria (From EC - Parks Manual)
   1. Semi-Serviced (Level 2):
      - Tent and trailer camping with no utility hook-ups.
      - Centralized sanitary, water and sewage disposal facilities are provided.
   2. Density of Campground: 8 - 18 sites/hectare.
   3. People/Campsite: 1 - 8 people/campsite.
   4. Capacity: 15 - 250 campsites.
2. Existing Conditions
   1. 59 Semi-Serviced Campsites.
   2. Illecillewaet Campground reaches 90% occupancy about 30 days per season, and has an average annual occupancy of 57%.

WESTERN REGION CAMPGROUND REPORT

G. RESOURCE CONSERVATION

EARP assessment Level One (Preliminary Screening) must be completed in 1988/89.

Level Two assessments must be completed prior to any detailed Area Development Plan.

H. INTERPRETATION

1. There is a need for a new information/interpretive Kiosk in the campground. This can link to the existing trail signs in the region.

2. There are guided hikes and this can be programmed asinformation on the Kiosk.

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WESTERN REGION CAMPGROUND REPORT

ILLECILLEWAET CAMPGROUND

DESCRIPTION OF WORK ITEM	PRIORITY	QUANTITY	UNIT COST	PHASING			TOTAL COST
				YR - 1	YR - 2	FUTURE	
A. ARCHITECTURE				9.9	165.62	NIL	175.52
B. LANDSCAPE				9.9	251.594	NIL	261.494
C. UTILITIES				12.9	90.02	NIL	102.92
D. GRAND TOTAL PROJECT COSTS				32.7	507.234	NIL	539.934

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WESTERN REGION CAMPGROUND REPORT

ILLECILLEWAET CAMPGROUND

DESCRIPTION OF WORK ITEM	PRIORITY	QUANTITY	UNIT COST	PHASING			TOTAL COST
				YR - 1	YR - 2	FUTURE	
A. ARCHITECTURE							
* 1. New Toilet Building		1	25.0		25.00		
* 2. New Shower Building (4 stall)		1	50.0		50.0		
3. Conversion of toilet building to handicapped access		2	1.5		3.0		
* 4. Remove existing brick toilet building		1	1.0		1.0		
5. Shelter improvements		2	6.0		12.0		
6. Toilet building improvements		2	8.0		16.0		
7. Upgrade on-site service/kiosk/ registration building		1	6.5		6.5		
8. SUB-TOTAL					113.5		113.5
9. CONTINGENCY: 20%					22.7		22.7
10. RISK: 15%					17.02		17.02
11. ENGINEERING: MBC: 55.0 x 1.8 x.2				9.9	9.9		19.8
12. ADMINISTRATION					2.5		2.5
13. TOTAL				9.9	165.62	NIL	175.52

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WESTERN REGION CAMPGROUND REPORT

ILLECILLEWAET CAMPGROUND

DESCRIPTION OF WORK ITEM	PRIORITY	QUANTITY	UNIT COST	PHASING			TOTAL COST
				YR - 1	YR - 2	FUTURE	
B. LANDSCAPE							
* 1. Stoves		57	0.010		0.57		
2. Tables		57	0.17		9.69		
3. Wheelstops		7	0.05		0.35		
4. Tent Pads		57	0.361		20.6		
5. Site Markers		57	0.017		0.974		
6. Spurs		57	0.532		30.35		
7. Sites		57	0.3		17.1		
8. Site Services		NIL	NIL		NIL		
9. Wood Bin: Covered		2	3.5		7.0		
10. Garbage Container		Lump	Sum		0.5		
11. Standpipes		5	0.1		0.5		
12. Roads		3800 squ. m	0.0027		10.3		
13. Trails							
(1) Existing		400 squ. m	0.0017		7.0		
(2) New		150 squ. m	0.030		4.5		
14. Campsite Barrier		285	0.025		7.2		
15. General Campground Rehab.		Lump	Sum		7.0		
16. Registration Kiosk Relocation							
Site Work:							
(1) Parking Area					5.5		
(2) Pavement					5.0		
(3) Sitework					2.0		
(4) Info. Facility					1.5		
					14.0		
SUB-TOTAL					137.634		

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WESTERN REGION CAMPGROUND REPORT

ILLECILLEWAET CAMPGROUND

DESCRIPTION OF WORK ITEM	PRIORITY	QUANTITY	UNIT COST	PHASING			TOTAL COST
				YR - 1	YR - 2	FUTURE	
B. LANDSCAPE (continued)					137.634		
(Service Plan Additions)							
17. Trails to ACC and Glacier Area		1470 squ. m	0.008		11.76		
18. Trailhead Kiosk		1	2.5		2.5		
19. Handicapped Access Campsites		6	1.3		7.8		
* 20. Upgrade Meeting of Waters Trail to Handicapped		Lump	Sum		15.0		
21. General Handicapped Access Improvements		Lump	Sum		2.5		
22. SUB-TOTAL					177.194		177.194
23. CONTINGENCY: 20%					35.43		35.43
24. RISK: 15%					26.57		26.57
25. ENGINEERING MBC: 55.0 x 1.8 x .2 PY				9.9	9.9		19.8
26. ADMINISTRATION					2.5		2.5
27. TOTAL				9.9	251.594		261.494

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WESTERN REGION CAMPGROUND REPORT

ILLECILLEWAET CAMPGROUND

DESCRIPTION OF WORK ITEM	PRIORITY	QUANTITY	UNIT COST	PHASING			TOTAL COST
				YR - 1	YR - 2	FUTURE	
C. UTILITIES							
1. ACC. (Wheeler Hut) Sanitation Imps.		1	7.5		7.5		
2. New Dumping Station		2 Lane	25.0		50.0		
3. Assess the Existing Sewer and Water System within Campgr.		Lump	Sum	3.0			
4. SUB-TOTAL				3.0	57.5		60.5
5. CONTINGENCY: 20%					11.5		11.5
6. RISK: 15%					8.62		8.62
7. ENGINEERING MBC: 55 X 1.8 X .2 PY				9.9	9.9		19.8
8. ADMINISTRATION					2.5		2.5
9. TOTAL				12.9	90.02		102.92

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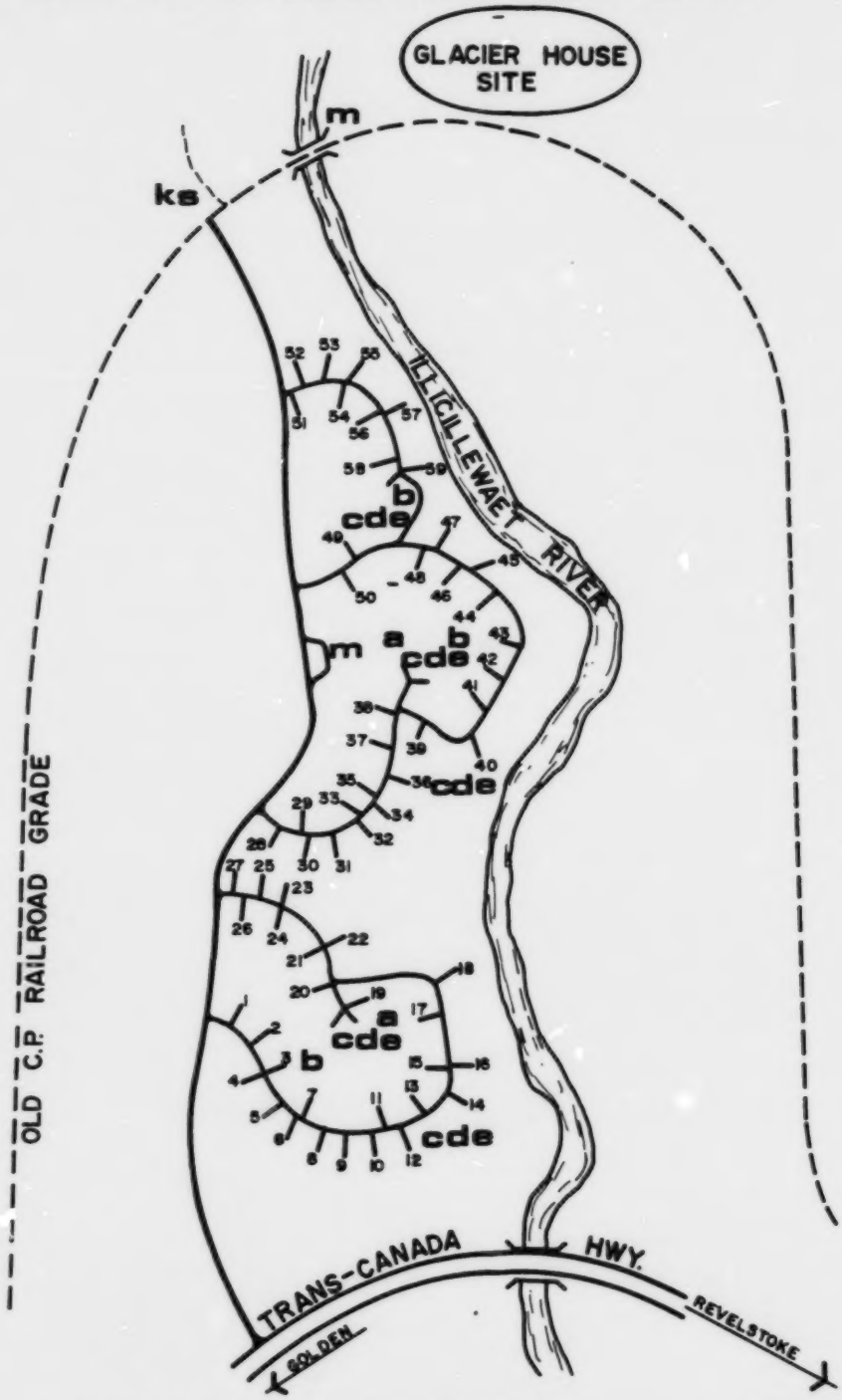
WESTERN REGION CAMPGROUND REPORT



LEGEND

- Kitchen Shelter - a
- Washrooms - b
- Well / Water Standpipe - c
- Wood Bin - d
- Garbage - e
- Outdoor Theatre - f
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- Residences - h
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Illecillewaet Campground - GLACIER

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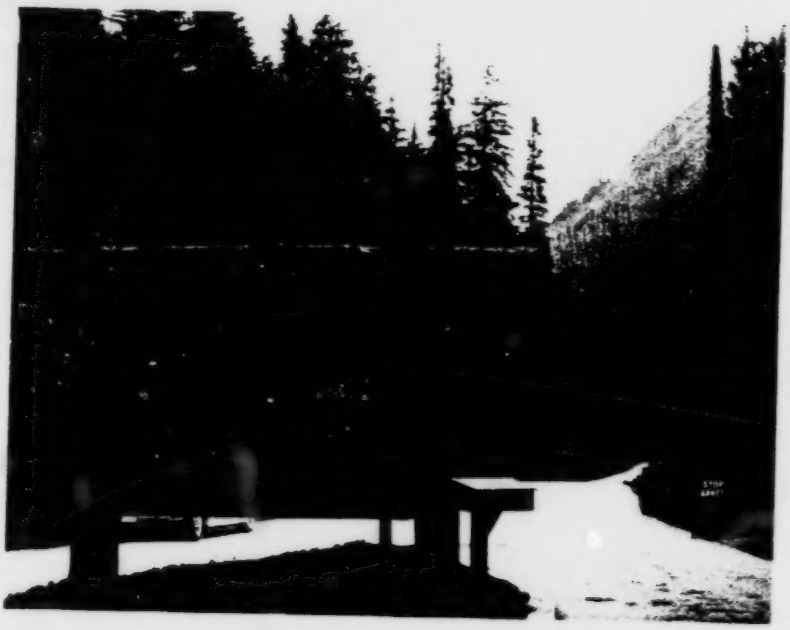
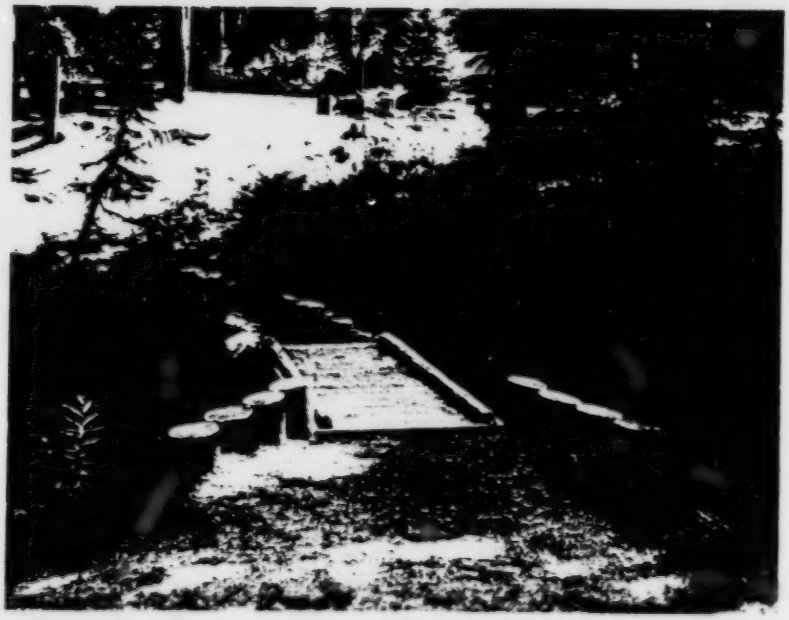
WESTERN REGION CAMPGROUND REPORT

ILLECILLEWAET CAMPGROUND GNP





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WESTERN REGION CAMPGROUND REPORT

ILLECILLEWAET CAMPGROUND GNP

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WESTERN REGION CAMPGROUND REPORT

WESTERN REGION CAMPGROUND REPORT

LOOP CREEK CAMPGROUND Date: August 26, 1987

Glacier National Park

A. PROJECT PROPOSAL

Prepare a campground rehabilitation plan for the 20 site campground. The scope of work would include the site rehabilitation, building improvements, utility improvements, pedestrian and vehicular circulation improvements and related work items.

B. PURPOSE

The improvements proposed are as a result of an on-site inspection and a brief review of the problems and anticipated needs/improvements. The Park will be preparing a Service Plan for the Glacier Park operation by May 31, 1988. This will identify the detailed requirements for the campgrounds and how the improvements can be carried out under the Regional Campground Study. This report however, has endeavored to identify some general comments/deficiencies that were present when the inspection was done in August 1987. The Service Plan is a good tool for managing the Park resources and facilities and this campground study will only react in a positive manner to the Service Plan.

C. FUNCTION

1. Team Members

Team Captain: Patrick Glover, WRO, Architectural & Engineering Services

Park Staff: Rick Reynolds, Chief, Visitor Services
Ernie Seiber, General Works Manager
_____, Interpretation
_____, Resource Conservation

2. Major Work Items

1. Buildings:

- Toilet Buildings - upgrade facilities.
- Shelter - upgrade facility.

WESTERN REGION CAMPGROUND REPORT

2. Utilities:

- Assess water and sewage disposal system and improve as required.
- Investigate propane requirements for heating water and lighting at toilet buildings.

3. Roads:

- Some roads have an asphalt surface and are generally in good condition.
- The loop roads are gravel and should be improved to possibly a chip seal finish if financially feasible.
- Upgrade signage.

4. Landscape:

- Universal sites.
- 20 sites existing require a universal site.
- Parking spur.
- Fire box.
- Portable/heavy type of table.
- Vehicle barriers required.
- Campsite markers.
- Linking trails to facilities.
- Fire wood enclosures.
- Tenting surface-soft.

5. Interpretation:

The campground is located adjacent to a large number of back country trails and a trailhead/information kiosk is required.

D. SCHEDULE

1. **1987/88:** Preliminary Inspection and Assessments of Campground.

2. **1987 -->:** Park Service Plan Prepared.

3. **Year One:** Detailed Assessment of Campground.

4. **Year Two:** Ongoing Recapitalization.

WESTERN REGION CAMPGROUND REPORT

E. OPERATIONAL AND MAINTENANCE

1. Design Capital Person Years are involved at WRO.

2. Investigate options for fuel use to generate lighting at Toilet Buildings and for hot water use.

F. GENERAL CAMPGROUND STATISTICS

1. Design Criteria (From EC - Parks Manual)

   1. Semi-Serviced (Level 2):

      - Tent and trailer camping with no utility hook-ups.
      - Centralized sanitary, water and sewage disposal facilities are provided. (Note: No sewage disposal facilities are existing.)

   2. Density of Campground: 8 - 18 sites/hectare.

   3. People/Campsite: 1 - 8 people/campsite.

   4. Capacity: 15 - 250 campsites.

2. Existing Conditions

   1. 20 Semi-Serviced Campsites.

   2. Loop Creek Campground reaches 90% occupancy about 45 days per season, and has an average annual occupancy of 62%.

G. RESOURCE CONSERVATION

EARP assessment Level One (Preliminary Screening) must be completed in 1988/89.

Level Two assessments must be completed prior to any detailed Area Development Plan.

H. INTERPRETATION

1. There is a need for a new information/interpretive Kiosk in the campground. This can link to the existing trail signs in the region.

2. There are guided hikes and this can be programmed as information on the Kiosk.

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WESTERN REGION CAMPGROUND REPORT

LOOP CREEK CAMPGROUND

DESCRIPTION OF WORK ITEM	PRIORITY	QUANTITY	UNIT COST	PHASING			TOTAL COST
				YR - 1	YR - 2	FUTURE	
A. ARCHITECTURE				NIL	34.9		34.9
B. LANDSCAPE				4.95	78.183	NIL	83.133
C. UTILITIES				NIL	27.95	NIL	27.95
D. GRAND TOTAL PROJECT COSTS				4.95	141.033	NIL	145.983

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WESTERN REGION CAMPGROUND REPORT

LOOP CREEK CAMPGROUND

DESCRIPTION OF WORK ITEM	PRIORITY	QUANTITY	UNIT COST	PHASING			TOTAL COST
				YR - 1	YR - 2	FUTURE	
A. ARCHITECTURE							
1. Toilet Building Improvements		Lump	Sum		8.0		
2. Shelter Imps.		Lump	Sum		7.5		
3. SUB-TOTAL					15.5		
4. CONTINGENCY					5.0		
5. RISK					3.0		
6. ENGINEERING MBC: 55 x 1.8 x 0.1 PY					9.9		
7. ADMINISTRATION					1.5		
8. TOTAL					34.9		

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WESTERN REGION CAMPGROUND REPORT

LOOP CREEK CAMPGROUND

DESCRIPTION OF WORK ITEM	PRIORITY	QUANTITY	UNIT COST	PHASING			TOTAL COST
				YR - 1	YR - 2	FUTURE	
B. LANDSCAPE							
1. Stoves		19	0.010		0.2		
2. Tables		19	0.175		3.325		
3. Wheelstops		19	0.025		0.475		
4. Tent Pads		19	0.373		7.1		
5. Site Markers		19	0.025		0.478		
6. Spurs		19	0.530		10.075		
7. Sites		19	0.265		5.050		
8. Site Services		NIL	NIL		NIL		
9. Wood Bins		1	3.5		3.5		
10. Garbage Containers		Lump	Sum		0.5		
11. Standpipes		3	0.2		0.6		
12. Roads		1200 squ. m	0.003		3.6		
13. Trails		125 squ. m	0.025		3.2		
14. General Campground Rehabilitation		Lump	Sum		5.0		
15. Campsite Barriers		100	0.025		2.5		
16. Self-Registration Kiosk		1	3.5		3.5		
17. SUB-TOTAL					49.103		49.103
18. CONTINGENCY 20%					9.82		9.82
19. RISK: 15%					7.36		7.36
20. ENGINEERING MBC: 55.0 x 1.8 x 0.15 PY				4.95	9.9		14.85
21. ADMINISTRATION					2.0		2.0
22. TOTAL				4.95	78.183	NIL	83.133

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WESTERN REGION CAMPGROUND REPORT

LOOP CREEK CAMPGROUND

DESCRIPTION OF WORK ITEM	PRIORITY	QUANTITY	UNIT COST	PHASING			TOTAL COST
				YR - 1	YR - 2	FUTURE	
C. UTILITIES							
1. Water Supply System		Lump	Sum		20.0		
2. CONTINGENCY AND RISK					2.0		
3. ENGINEERING MBC: 55 x 1.8 x 0.05					4.95		
4. ADMINISTRATION					1.0		
5. TOTAL					27.95		

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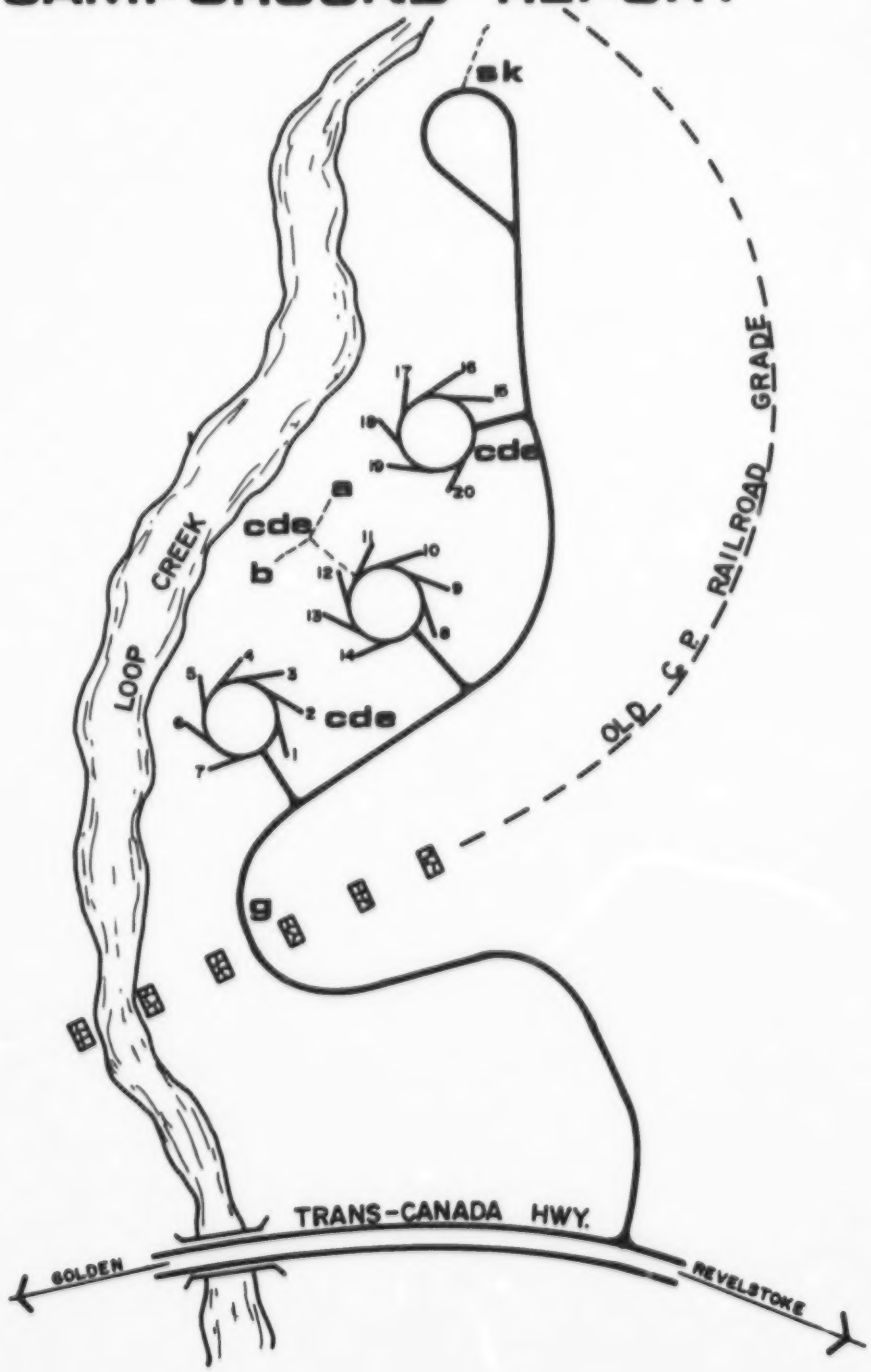

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Loop Creek Campground - GLACIER

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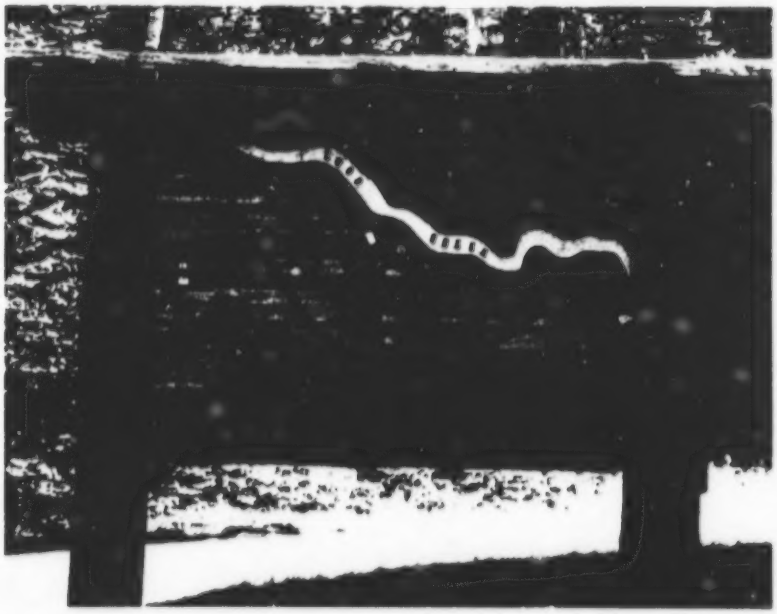

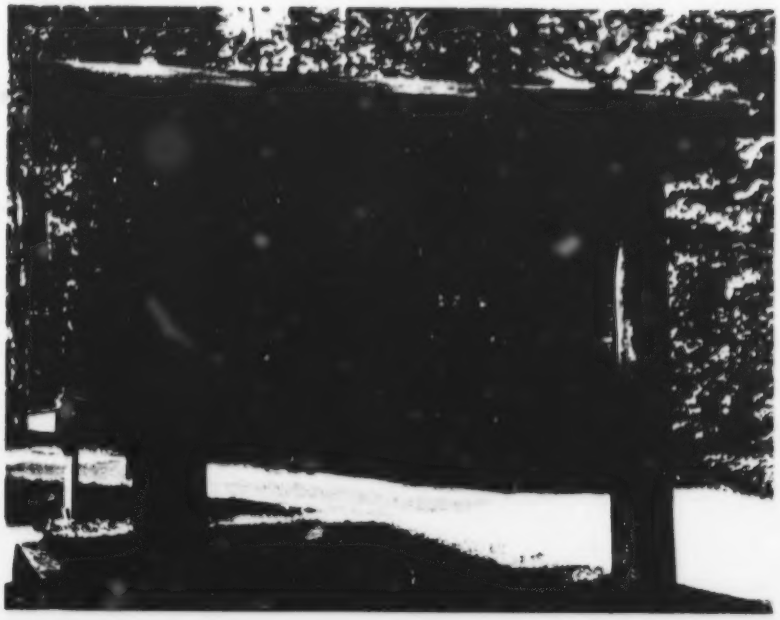

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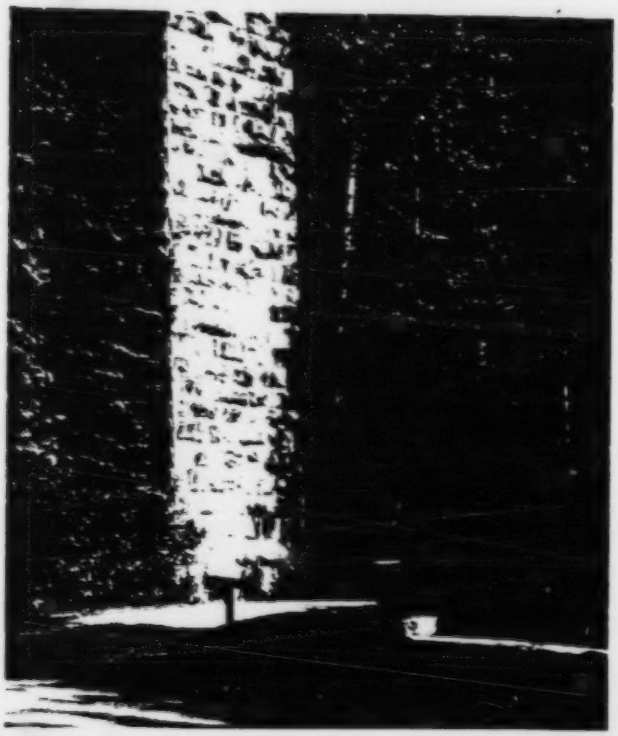
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